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Appl. No. 09/843,589
Attorney Docket No. 450103-05764

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

Listing of Claims:

1. (Previously Presented) An interactive enabling system for managing interactive program content associated with enhanced program content and interactive commercial content associated with commercial spots, the system comprising:

an interactive enabling device coupled for receiving a broadcast stream, said broadcast stream including the enhanced program content in series with the commercial spots, the broadcast stream further including interactive program triggers and interactive commercial triggers for retrieving the interactive program and commercial content; and

at least one interactive content server coupled for communicating with an interactive control application in the interactive enabling device;

wherein the interactive enabling device executes the interactive control application to manage the retrieval of the interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial triggers.

2. (Previously Presented) The system as recited in claim 1, wherein the interactive control application includes a gatekeeper function for selectively retrieving interactive program and commercial content in response to recognized interactive program and commercial triggers.

3. (Original) The system as recited in claim 1, wherein the interactive enabling device retrieves the interactive program and commercial content from the at least one interactive content server through a communication link or assembled from information in the broadcast stream.

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4. (Previously Presented) The system as recited in claim 2, wherein the interactive enabling device is configured for receiving and responding to event and time-driven triggers embedded in the broadcast stream to ensure that the interactive program and commercial content do not extend beyond specified time limits, overlap, or otherwise interfere with each other.

5. (Original) The system as recited in claim 2, wherein the gatekeeper is configured to recognize the interactive program and commercial triggers based on agreements between broadcasters and program or commercial sponsors.

6. (Original) The system as recited in claim 2, wherein the gatekeeper is configured to recognize the interactive program and commercial triggers based on parameters embedded within the interactive program and commercial triggers.

7. (Original) The system as recited in claim 2, wherein the gatekeeper is configured to recognize the interactive program and commercial triggers based on parameters maintained within the interactive enabling device.

8. (Previously Presented) The system as recited in claim 1, further comprising:
a plurality of additional interactive enabling devices in addition to said interactive enabling device, each of said plurality of additional interactive enabling devices coupled for receiving the broadcast stream;

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wherein the interactive enabling device and each of the additional interactive enabling devices includes a corresponding randomizer for randomly time-skewing the retrieval of the interactive program and commercial content in response to the interactive program and commercial triggers.

9. (Currently Amended) An interactive enabling system for managing interactive program content associated with enhanced program content and interactive commercial content associated with commercial spots, the system comprising:

an interactive enabling device coupled for receiving a broadcast stream generated by a broadcast sponsor and for responding to interactive program pre-triggers and commercial pre-triggers inserted into the broadcast stream for retrieving the interactive program and commercial content in advance of when the content is needed, said broadcast stream including the enhanced program content and the commercial spots; and

at least one interactive content server coupled through a communication link for communicating with an interactive control application in the interactive enabling device;

wherein the interactive enabling device executes the interactive control application to manage the retrieval of the interactive program and commercial content in response to the interactive program pre-triggers and commercial pre-triggers; and

wherein the interactive enabling device is configured to respond to an interactive commercial pre-trigger that has been embedded in the enhanced program content in the broadcast stream.

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10. (Currently Amended) The system as recited in claim 9, wherein the interactive enabling device is configured for receiving interactive program pre-triggers and commercial pre-triggers that were inserted into the broadcast stream by the broadcast sponsor at a specific time in advance of when the interactive program and commercial content is needed, based on estimates for communication link speed.

11. (Currently Amended) The system as recited in claim 9,
wherein the interactive enabling device includes a list of approved pre-triggers; and
wherein the interactive control application enables the retrieval of the interactive program and commercial content only if codes embedded in the interactive program pre-triggers and commercial pre-triggers match the codes in the list of approved pre-triggers.

12. (Currently Amended) The system as recited in claim 9, further comprising:
a plurality of additional interactive enabling devices in addition to said interactive enabling device, each of said plurality of additional interactive enabling devices coupled for receiving the broadcast stream;
wherein the interactive enabling device and each of the additional interactive enabling devices includes a corresponding randomizer for randomly time-skewing the retrieval of the interactive program and commercial content in response to the interactive program pre-triggers and commercial pre-triggers.

13. - 18. (Canceled)

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19. (Previously Presented) A method for managing interactive program content associated with enhanced program content and interactive commercial content associated with commercial spots, comprising:

receiving a broadcast stream, said broadcast stream including the enhanced program content in series with the commercial spots, the broadcast streamer further including interactive program triggers and interactive commercial triggers for retrieving the interactive program and commercial content from at least one interactive content server; and

managing the retrieval of the interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial triggers.

20. (Original) The method as recited in claim 19, further including selectively retrieving interactive program and commercial content in response to recognized interactive program and commercial triggers.

21. (Original) The method as recited in claim 19, further including retrieving the interactive program and commercial content from the at least one interactive content server through a communication link or assembling the interactive program and commercial content from information in the broadcast stream.

22. (Original) The method as recited in claim 20, further including receiving and responding to event and time-driven triggers embedded in the broadcast stream to ensure that the

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interactive program and commercial content do not extend beyond specified time limits, overlap, or otherwise interfere with each other.

23. (Original) The method as recited in claim 20, further including recognizing the interactive program and commercial triggers based on agreements between broadcasters and program or commercial sponsors.

24. (Original) The method as recited in claim 20, further including recognizing the interactive program and commercial triggers based on parameters embedded within the interactive program and commercial triggers.

25. (Original) The method as recited in claim 20, further including recognizing the interactive program and commercial triggers based on parameters maintained within the interactive enabling device.

26. (Previously Presented) The method as recited in claim 19,
wherein the step of receiving comprises:

receiving a broadcast stream by each of a plurality of interactive enabling devices
said broadcast stream including the enhanced program content in series with the
commercial spots, the broadcast stream further including interactive program triggers
and interactive commercial triggers for retrieving the interactive program and
commercial content from at least one interactive content server;

wherein the step of managing comprises:

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managing each of the plurality of interactive enabling devices the retrieval of the interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial triggers; and wherein the method further includes:

randomly time-skewing, by each of the plurality of interactive enabling devices, the retrieval of the interactive program and commercial content in response to the interactive program and commercial triggers.

27. (Currently Amended) A method for managing interactive program content associated with enhanced program content and interactive commercial content associated with commercial spots, comprising:

receiving a broadcast stream generated by a broadcast sponsor and responding to interactive program pre-triggers and commercial pre-triggers inserted into the broadcast stream for retrieving the interactive program and commercial content in advance of when the content is needed, said broadcast stream including the enhanced program content and the commercial spots; and

managing the retrieval of the interactive program and commercial content in response to the interactive program pre-triggers and commercial pre-triggers, said managing including retrieving interactive commercial content in response to receiving an interactive commercial pre-trigger that has been embedded in the enhanced program content in the broadcast stream.

28. (Currently Amended) The method as recited in claim 27, further including: maintaining a list of approved pre-triggers; and

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enabling the retrieval of the interactive program and commercial content only if codes embedded in the interactive program pre-triggers and commercial pre-triggers match the list of approved pre-triggers.

29. (Currently Amended) The method as recited in claim 27,

wherein the step of receiving comprises:

receiving a broadcast stream by each of a plurality of interactive enabling devices, said broadcast stream generated by a broadcast sponsor; and

responding, by each of the plurality of interactive enabling devices, to interactive program pre-triggers and commercial pre-triggers inserted into the broadcast stream for retrieving the interactive program and commercial content in advance of when the content is needed, said broadcast stream including the enhanced program content and the commercial spots;

wherein the step of managing comprises:

managing, by each of the plurality of interactive enabling devices the retrieval of the interactive program and commercial content in response to the interactive program pre-triggers and commercial pre-triggers, said managing including retrieving interactive commercial content in response to receiving an interactive commercial pre-trigger that has been embedded in the enhanced program content in the broadcast stream; and

wherein the method further includes:

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randomly time-skewing, by each of the plurality of interactive enabling devices, the retrieval of the interactive program and commercial content in response to the interactive program pre-triggers and commercial pre-triggers.

30. - 33. (Canceled)

34. (Previously Presented) The system as recited in claim 1,

wherein the broadcast stream further includes interactive program pre-triggers for triggering the retrieving of corresponding interactive program content in advance of when a portion of enhanced program content of the enhanced program content that is associated with the corresponding interactive program content is received in the broadcast stream;

wherein the broadcast stream further includes interactive commercial pre-triggers for triggering the retrieving of corresponding interactive commercial content in advance of when a commercial spot of the commercial spots that is associated with the corresponding interactive commercial content is received in the broadcast stream; and

wherein the interactive enabling device is configured to respond to the interactive program and commercial pre-triggers by executing the interactive control application to manage the retrieval of the corresponding interactive program and commercial content from the at least one interactive content server.

35. (Previously Presented) The system as recited in claim 34,

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wherein the, interactive enabling device is configured to respond to an interactive commercial pre-trigger that has been embedded in the enhanced program content in the broadcast stream.

36. (Previously Presented) The system as recited in claim 34,

wherein said interactive enabling device is configured to respond to an interactive commercial pre-trigger by executing said interactive control application to manage the retrieval of interactive commercial content that is specified by the interactive commercial pre-trigger during a time when the interactive enabling device is receiving the enhanced program content in the broadcast stream.

37. (Previously Presented) The system as recited in claim 34,

wherein the interactive enabling device is configured to respond to an interactive program pre-trigger that has been embedded in one of the commercial spots in the broadcast stream.

38. (Previously Presented) The system as recited in claim 34,

wherein said interactive enabling device is configured to respond to an interactive program pre-trigger by executing said interactive control application to manage the retrieval of interactive program content that is specified by the interactive program pre-trigger during a time when the interactive enabling device is receiving the commercial spots in the broadcast stream.

39. (Previously Presented) The system as recited in claim 9,

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wherein said interactive enabling device is configured to respond to said interactive commercial pre-trigger by executing said interactive control application to manage the retrieval of interactive commercial content that is specified by the interactive commercial pretrigger during a time when the interactive enabling device is receiving the enhanced program content in the broadcast stream.

40. (Previously Presented) The system as recited in claim 9,

wherein the interactive enabling device is configured to respond to an interactive program pre-trigger that has been embedded in one of the commercial spots in the broadcast stream.

41. (Previously Presented) The system as recited in claim 9,

wherein said interactive enabling device is configured to respond to an interactive program pre-trigger by executing said interactive control application to manage the retrieval of interactive program content that is specified by the interactive program pre-trigger during a time when the interactive enabling device is receiving the commercial spots in the broadcast stream.

42. (Previously Presented) The system as recited in claim 9,

wherein the interactive commercial pre-trigger occurs earlier in the broadcast stream than a commercial spot of the commercial spots that is associated with the interactive commercial pre-trigger.

43. (Previously Presented) The system as recited in claim 12,

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wherein the interactive enabling device and each of the additional interactive enabling devices are configured such that each of their corresponding randomizers randomly time-skews a beginning of a retrieval of interactive commercial content that is specified by the interactive commercial pre-trigger within an allotted time window.

44. (Previously Presented) The system as recited in claim 43,

wherein the time window is a time period during which the interactive enabling device and each of the additional interactive enabling devices receive the enhanced program content in the broadcast stream.

45. (Previously Presented) The method as recited in claim 19,

wherein the broadcast stream further includes interactive program pre-triggers for triggering the retrieving of corresponding interactive program content in advance of when a portion of enhanced program content of the enhanced program content that is associated with the corresponding interactive program content is received in the broadcast stream;

wherein the broadcast stream further includes interactive commercial pre-triggers for triggering the retrieving of corresponding interactive commercial content in advance of when a commercial spot of the commercial spots that is associated with the corresponding interactive commercial content is received in the broadcast stream; and

wherein the method further includes:

managing the retrieval of the corresponding interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial pre-triggers.

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46. (Previously Presented) The method as recited in claim 45,
wherein the step of managing the retrieval of the corresponding interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial pre-triggers, comprises:
managing the retrieval of interactive commercial content that is specified by an interactive commercial pre-trigger in response to receiving the interactive commercial pretrigger, said interactive commercial pre-trigger having been embedded in the enhanced program content in the broadcast stream.

47. (Previously Presented) The method as recited in claim 45,
wherein the step of managing the retrieval of the corresponding interactive program and commercial content from the at least one interactive content server in response to the interactive program and commercial pre-triggers, comprises:
managing the retrieval of interactive program content that is specified by an interactive program pre-trigger in response to receiving the interactive program pre-trigger, said interactive program pre-trigger having been embedded in one of the commercial spots in the broadcast stream.

48. (Previously Presented) The method as recited in claim 27,
wherein the step of managing includes:
managing the retrieval of interactive commercial content specified by an interactive commercial pre-trigger in response to receiving the interactive commercial pre-trigger, said

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interactive commercial pre-trigger having been embedded in the enhanced program content in the broadcast stream, said retrieval of the interactive commercial content specified by the interactive commercial pre-trigger occurring during a time when the enhanced program content is received in the broadcast stream.

49. (Previously Presented) The method as recited in claim 48,

wherein the step of managing further includes:

managing the retrieval of interactive program content in response to receiving an interactive program pre-trigger that has been embedded in one of the commercial spots in the broadcast stream.

50. (Previously Presented) The method as recited in claim 49,

wherein the step of managing the retrieval of interactive program content in response to receiving an interactive program pre-trigger that has been embedded in one of the commercial spots in the broadcast stream, includes:

managing the retrieval of interactive program content specified by an interactive program pre-trigger in response to receiving the interactive program pre-trigger, said-interactive program pre-trigger having been embedded in a commercial spot of the commercial spots in the broadcast stream, said retrieval of the interactive program content specified by the interactive program pre-trigger occurring during a time when the commercial spot is received in the broadcast stream.